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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/596,028

05/25/2006

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1849

23416 7590 01/21/2011
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EXAMINER

CHOI, WILLIAM C

ART UNIT

PAPER NUMBER

2873

MAIL DATE

DELIVERY MODE

01/21/2011

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/596,028	Applicant(s) GARDNER ET AL.	
	Examiner WILLIAM C. CHOI	Art Unit 2873	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 August 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-23 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3-7, 9-17 and 21-23 is/are allowed.
- 6) ☒ Claim(s) 1 and 18-20 is/are rejected.
- 7) ☒ Claim(s) 8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bähler (US 5,851,279) in view of Chen et al (US 6,768,555 B2).

In regard to claim 1, Bähler discloses in combination, a light source and a subject (column 2, lines 52-54, re: ambient white light and an automobile), wherein the subject has a pigment applied thereto, wherein the pigment has a reflection spectrum characterized by one of a distinctively stronger reflection peak at the predetermined wavelength compared to said other wavelengths and a distinctively weaker reflection gap at the predetermined wavelength compared to said other wavelengths; wherein the pigment gives the subject a distinct appearance when illuminated by the light source, due to the emission peak matching one of the reflection peak and the reflection gap (column 2, line 49 – column 3, line 12, Figure 1), as compared to a nominal appearance when illuminated by an alternate light source which does not include the distinctively stronger emission peak at the predetermined wavelength as compared to said other wavelengths (i.e. a red light), but doesn't specifically disclose wherein the light source

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has an illumination spectrum characterized by a distinctively stronger emission peak at a predetermined wavelength within a visible spectrum compared to other wavelengths.

Within the same field of endeavor, Chen et al teaches that it is well known in the art that white light includes multiple peaks in red, green and blue visible light wavelengths (column 7, lines 11-13, Figure 3, re: 440, 550, 625 nm). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made for the light source of Bähler to have an illumination spectrum characterized by a distinctively stronger emission peak at a predetermined wavelength within a visible spectrum compared to other wavelengths since Chen et al teaches that it is well known in the art.

Regarding claim 18, Bähler discloses wherein the pigment is applied to the subject as a surface coating (column 2, lines 52-54).

Regarding claim 19, Bähler discloses wherein the pigment is applied to the subject by incorporating the pigment into the subject (column 4, lines 61-65, re: engineering plastics).

Regarding claim 20, Bähler discloses wherein the pigment is applied to the subject as identifying indicia (column 2, lines 52-54, re: car color).

Allowable Subject Matter

Claims 3-7, 9-17 and 21-23 allowed.

The following is a statement of reasons for the indication of allowable subject matter: The prior art fails to teach a combination of all the claimed features as presented

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in claims 3-7: a combination of a light source and a subject, specifically wherein the light source has an illumination spectrum characterized by a plurality of narrow peaks within a visible spectrum and the subject has a pigment applied thereto, wherein the pigment has a reflection spectrum characterized by one or more reflection gaps; the pigment gives the subject a distinct appearance when illuminated by the light source due to a color shift from at least one of the narrow peaks matching one or more of the reflection gaps, as compared to a nominal appearance when illuminated by a broadband light source.

The prior art fails to teach a combination of all the claimed features as presented in claims 9-17 and 21-23: a method for producing a visible change in appearance comprising the combination of steps of: applying a pigment to a subject, the pigment having at least one discrete absorption band within a reflective spectrum; illuminating the subject with a first light source having a visible illumination spectrum encompassing the reflective spectrum of the pigment, whereupon the subject has an appearance that is nominal; subsequently illuminating the subject with a second light source characterized by a visible illumination spectrum with discrete illumination bands, wherein at least one of the illumination bands overlaps the absorption band of the pigment, thereby visibly changing the appearance of the subject to be different than nominal.

Claim 8 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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The following is a statement of reasons for the indication of allowable subject matter: The prior art fails to teach a combination of all the claimed features as presented in claim 8: a combination as claimed, specifically wherein the emission peak corresponds to a primary color, and the illumination spectrum is further characterized by at least one additional distinct emission peak, such that the illumination spectrum provides simulated broadband illumination.

Response to Arguments

Applicant's arguments with respect to claims 1 and 18-20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIAM C. CHOI whose telephone number is (571)272-2324. The examiner can normally be reached on Monday-Friday from about 9:00 am to 6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Mack can be reached on (571) 272-2333. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/William C. Choi/
Primary Examiner, Art Unit 2873
January 18, 2011